Summary of Comments
on Public Review Draft of Riverside County WQMP

	Section of WQMP	Comment	Made By	How Addressed
1	General comment	While to some extent, Riverside's Model does parallel the other counties' models, the present Model falls short of achieving the same, adequate level of protection against post-development urban runoff and stormwater pollution. For instance, the Riverside Model largely ignores the consideration of cumulative impacts and watershed-based planning. To be adequate and meet the MEP standard, the Model must specify that project proponents consider and address the cumulative impacts of the project, including all downstream impacts to waters up to and including the ultimate receiving water, which in some cases is the Pacific Ocean. This lack of attention to cumulative impacts is a major deficiency of the program as it currently stands.	Defend the Bay	The Permittees received separate comments from the Regional Board staff. We have addressed those comments and believe that the revised WQMP meets and exceeds permit requirements.
2	General comment	The Permittees will need to clarify that the WQMP applies to both discretionary and non-discretionary projects. WQMP requirements are based on threat to water quality and type/category of development, not the discretionary status.	SDRWQCB	The Permittees note that non-discretionary projects have prior legal approval per R9-2004-001 Provision F.2.b.
3	Section 1.0, Page 2	Section 1.0, Page 2 states that projects within the Santa Margarita River Region that do not have conditions of approval or map approval by the SUSMP compliance date in tentative Order R9-2004-001 will be required to develop a project specific WQMP. The Permittees, however, are required to ensure SUSMPs are included in projects (where feasible) upon adoption of the tentative Order. We will notify the Permittees that we expect them to require post-construction structural BMPs through their DAMP and/or WQMP process until the SUSMPs are fully implemented.	SDRWQCB	The Permittees are continuing to implement Supplement A of the DAMP, which requires consideration of source and treatment control BMPs, until the WQMP/SUSMP is implemented in the Santa Margarita Region of Riverside County.

Summary of SDRWQCB, Defend the Bay Comments on Public Review Draft of Riverside County WQMP (continued)

	Section of WQMP	Comment	Made By	How Addressed
4	Section 1.0	The Model fails to state anywhere the standard as set forth in the Permit that discharges from new development and significant redevelopment not cause or contribute to exceedances of water quality standards. The Model should be revised to explicitly incorporate this standard in the introduction. Absent such a discussion, developers will not be able to formulate plans to accommodate these water quality concerns and leave them ignorant of the standard of performance to which they are being obligated.	Defend the Bay	The Permit regulates discharges from MS4 outfalls to Receiving Waters. The Permit requires that discharges from new development must meet MEP (Section VIII.B.3.d.) This WQMP document defines the MEP standard for new development.
5	Section 3.1, Page 5	The definition of Significant Redevelopment will need to be changed to include the replacement of structure of at least 5,000 square feet.	SDRWQCB	Revision made in June 25 draft.
6	Section 3.3, Page 6	This section would need to include Environmentally Sensitive Areas as a development type for the Santa Margarita River Region.	SDRWQCB	Revision made in June 25 draft.

Summary of SDRWQCB, Defend the Bay Comments on Public Review Draft of Riverside County WQMP (continued)

	Section of WQMP	Comment	Made By	How Addressed
7	Section 3.0	This section sets forth the types of projects requiring a project-specific WQMP, namely new development and significant redevelopment. The Model states in passing in Section 2.1 that other development projects will be required to incorporate Site Design and Source Control BMPs through conditions of approval in accordance with the applicable DAMP. While we agree that all projects must be required to incorporate site design and source control BMPs, establishing a separate process by which such criteria are implemented is not efficient and is likely to confuse and be less effective than if all new development and redevelopment be considered under the same process. Furthermore, even if a separate process is necessary to consider some types of new development and redevelopment, it is improper to simply make reference to some ambiguous process in the Model rather that specify it directly in the Model. Overall, then, Section 3.0 should specify that all projects require the development of project-specific WQMPs, but that only those WQMPs for new development and significant development need incorporate all three types of BMPs, including treatment control BMPs.	Defend the Bay	As is noted in our June 25 Summary of Comments, (Response #1 through 3), Supplement A of the DAMP will continue to address development projects that do not require a Project-Specific WQMP. The Permittees have also developed these documents and procedures per the Permit requirements, and in a manner that is administratively and logistically efficient for the Permittees and Development community.
8	Section 3.1	The draft specifies that a WQMP is required for only the additional impervious surface if the redevelopment results in an increase of less than fifty percent of the impervious surfaces of an existing development. While you have quoted the requirement directly from the Permit, it is our position that a better approach (as implemented in Orange County) is to encourage permittees to consider ways to incorporate the entire development, both original and new, to achieve possible economies of scale and take advantage of the opportunity presented to address a larger problem.	Defend the Bay	Thank you for your suggestion. Although the Permittees are opting to retain the current language, we will be supportive of this approach.

Summary of SDRWQCB, Defend the Bay Comments on Public Review Draft of Riverside County WQMP (continued)

	Section of WQMP	Comment	Made By	How Addressed
9	Section 4.4, Page 9	This section includes three conditions (A, B, & C) that relieve a project of the requirement to address hydrologic conditions of concern within the WQMP. The Permittees will need to provide additional information on why these conditions would prevent increased downstream erosion and protect stream habitat.	SDRWQCB	Please refer to our June 25 Summary of Comments response #14 to SARWQCB comments.
10	Section 4.5.3.5	Volume Based Design appears to limit project proponents to using the unit basin storage volume to calculate the volume of runoff to be treated. We will point out to the Permittees that other methods for calculating the volume of runoff to be treated could be allowed to increase flexibility.	SDRWQCB	The Permittees have developed a BMP design manual based on this specific method. The BMP design manual incorporates specific graphs and charts based on rainfall conditions in Riverside County that simplify the volume sizing process. The Permittees, although not limiting calculations to this method, are recommending implementation of it to speed up the design and review process for volume based BMPs.
11	Section 4.5.3.5	Volume Based Design, A unit basin storage volume method would need to achieve 90% or more volume treatment not the 85% listed in the draft WQMP.	SDRWQCB	Permittees are implementing R9-2004-001 Permit requirement F.3.a.ii, not F.3.a.iii. The design criteria, based on the ASCE/WEF methodology, for F.3.a.ii is 85% volume treatment of runoff.
12	Section 4.5.4	Equivalent Treatment Control Alternatives allows off-site equivalent treatment BMPs if on-site treatment BMPs are determined to be infeasible or impracticable. This section appears to be allowing shared BMPs that treat runoff prior to discharge to receiving waters. Shared BMPs could be allowed under our Permit whether or not on-site structural BMPs are determined infeasible.	SDRWQCB	Language has been modified to more proactively promote shared BMPs.
13	Section 4.1	In identifying the pollutants of concern generated by a project, the Model only considers the pollutants expected from the type of development and land use. To fully characterize the pollutants of concern from a project, however, site-specific conditions must be considered. These conditions include the presence of legacy pesticides, nutrients, or hazardous materials in the soils. A project applicant, therefore, must be required to include a discussion of such site-specific conditions.	Defend the Bay	Changes incorporated. Please refer to our June 25 Summary of Comments response #12 to SARWQCB comments.

Summary of SDRWQCB, Defend the Bay Comments on Public Review Draft of Riverside County WQMP (continued)

	Section of WQMP	Comment	Made By	How Addressed
14	Section 4.1	Moreover, by referring project proponents to a table of land-use types and potential pollutants, the draft effectively exempts certain pollutants, such as TDS, salinity, and chlorides because they are not "commonly" of concern in development projects. As with the site-specific pollutants above, the Model should seek to be as comprehensive as possible in identifying the pollutants generated from a development project.	Defend the Bay	Exhibit B is intended as a guide to potential pollutants likely to be generated in runoff from various land use types. It is not intended to be limiting or exempt other constituents as projects are considered individually. It should be noted that the June 25 draft of the WQMP now also requires project proponents to consider legacy pollutants associated with the project site. Further, language has been added to allow Permittees to require certain pollutants to be addressed based on known problems in a watershed and suspected links to a land use.
15	Section 4.1	Toward that end, however, the draft provides little specificity as to how pollutants of concern are identified. In fact, the draft suggests that only those pollutants that are also identified as impairing receiving waters are those "of concern." This is misleading and untrue. All pollutants generated by a project are "of concern" and must be addressed. The draft's language should be revised to remove this potential confusion.	Defend the Bay	Language revision made in section 4.3 to clarify: "To identify pollutants impairing proximate Receiving Waters, each project proponent preparing a project-specific WQMP shall, at a minimum, do the following:"
16	Section 4.1 (Section 4.3)	In this connection, it is inappropriate and potentially misleading to introduce the selection of BMPs based on effectiveness here, as the current draft does, in a discussion regarding the identification of pollutants of concern. This discussion should be moved to Section 4.5 and made more specific to identify exactly how BMP effectiveness need be "specifically consider [ed]."	Defend the Bay	The following language has been added to the last paragraph in Section 4.3: "See Section 4.5, BMP Selection, for additional guidance in selecting appropriate BMPs to address Pollutants of Concern."

Summary of SDRWQCB, Defend the Bay Comments on Public Review Draft of Riverside County WQMP (continued)

	Section of WQMP	Comment	Made By	How Addressed
17	Section 4.1 (Section 4.3)	Lastly, the Model fails to require the applicant to consider all downstream waters. It is meaningless for an applicant to consider only the immediate receiving water and the impacts on that water when the flows from the project will invariably impact waters downstream from that receiving water as well. As such, the Model completely fails to address cumulative impacts, which as discussed above, is a major deficiency of the program.	Defend the Bay	The Santa Ana Permit requires the Co-Permittees, when determining pollutants of concern, to consider the quality and sensitivity of Receiving Waters in proximity to the project site (Section VIII.B.2.a). The WQMP requirements are consistent with the language in the Santa Ana Permit.
18	Section 4.4	It is not clear how Conditions B and C comply with the Permit's requirement that projects minimize changes to a site's hydrologic regime. In fact, given that only one of Condition A, B, or C needs to be established to exempt a project from analyzing its hydrologic effects, it can almost be assured that hydrologic impacts will not be minimized. In fact, given that the Model does not address cumulative impacts, it is possible that multiple 1-acre projects will severely alter a hydrologic regime cumulatively yet not be required to address any associated hydrologic issues of concerns. Absent such an analytical process, the Model cannot be considered to be sufficiently protective of water quality to be approved of by the Regional Board.	Defend the Bay	This section has been modified to clarify the basis for Conditions B and C. Please refer to June 25 Summary of Comments response #14 to SARWQCB comments. Also note that the WQMP requires the project proponent to consider "the hydrology of the entire tributary watershed" when assessing Hydrologic Conditions of Concern" (Section 4.4, Paragraph 6).
19	Section 4.4	Additionally, this section is wholly unspecific. For instance, it states only that project applicants ***may*** be required to submit a drainage study report. Orange County ***requires*** such a study. Furthermore, Orange County's Model goes further in setting forth the specific requirements for such a study. Overall, the Model should present a much more specific and stepwise analytical procedure for evaluating hydrological issues of concern in order to ensure that the project WQMP minimizes those issues of concerns. Absent such an analytical process, the Model cannot be considered to be sufficiently protective of water quality to be approved of be the Regional Board.	Defend the Bay	The Permittees have implemented measures that are protective of water quality in local watersheds. However, the Regional Board raised several issues relative to Section 4.4. Please see June 25 Summary of Comments, responses # 14, 15, 16, and 17. It should be noted that the Permittees have made several clarifying modifications, which have addressed these issues

Summary of SDRWQCB, Defend the Bay Comments on Public Review Draft of Riverside County WQMP (continued)

	Section of WQMP	Comment	Made By	How Addressed
20	Section 4.5	The discussion in Section 4.1 regarding selecting BMPs based on their effectiveness should be moved here and expanded to provide project proponents with actual guidance. For instance, the OC Model states that for pollutants of concern that are causing an impairment in receiving waters, the project WQMP incorporate one or more BMPs with medium or high effectiveness. For other pollutants, BMPs should be selected that are effective in reducing those pollutants. Similar guidance should be provided here.	Defend the Bay	Comments incorporated. Refer to June 25 Summary of Comments response # 30 for revisions relative to minimum treatment requirements for impaired water bodies. Also note that Table 3 has been included in section 4.5 to describe BMP treatment effectiveness.
21	Section 4.5.1	The Model conditions incorporation of site design BMPs in part based on feasibility. Likewise, Table 2 specifies that site design BMPs be incorporated to the extent practicable. Infusing the Model with such standards, however, is inappropriate and a practice not followed by any of the neighboring county models. Rather, site design BMPs must be incorporated as applicable given project characteristics.	Defend the Bay	The Permittees are required to implement specific classes of site design BMPs, such as site design BMPs to Conserve Natural Areas and minimize impervious area. Specific site design BMPs are not required. Therefore, as long as the concepts are implemented, the Permit requirements have been met.
22	Section 4.5.1	Furthermore, the Model does not provide that project proponents provide a justification for excluding specific site design BMPs, a justification that is otherwise required for not including source control BMPs. This is inconsistent and must be corrected.	Defend the Bay	
23	Section 4.5.3	This section starts out by stating that treatment control BMPs must be selected with respect to identified pollutants of concern, but neglects to mention hydrologic conditions of concern. This language must be changed to comply with the Permit terms.	Defend the Bay	Revision made to section 4.5.3 to include Hydrologic Conditions of Concern.
24	Section 4.5.3	Language must be also added that treatment control BMPs be located to treat the required runoff volume or flow prior to discharging to any receiving water, which is a specific condition of Riverside's stormwater permit. Permit § VIII.B.3.i. This is especially true for the Model's discussion of treatment control BMPs associated with common schemes of development. *See* Permit § VIII.B.6.e	Defend the Bay	Revisions made to be consistent with permit requirements.

Summary of SDRWQCB, Defend the Bay Comments on Public Review Draft of Riverside County WQMP (continued)

	Section of WQMP	Comment	Made By	How Addressed
25	Section 4.5.3.4	This section specifies that the Rational Formula (Q=CiA) be used to calculate the flow for which a flow-based BMP should be designed. The Model's reliance on this formula is outdated and overly simplistic. It is commonly known that the Formula incorporates serious oversimplifications and ignorance of certain factors that affect the actual hydrologic process that occurs at a particular site. Indeed, the CASQA Stormwater Best Management Practice Handbook on New Development and redevelopment recognizes that the Rational Formula is limited in its usefulness in many circumstances involving new development and redevelopment. *See* California Stormwater Quality Association*, Stormwater Best Management Pratice Handbook: New Development and Redevelopment 5-20 (Jan. 2003)*	Defend the Bay	Refer to June 25 Summary of Comments response #33 to SARWQCB comments.
26	Section 4.5.3.4	As an alternative, we suggest that a continuous simulation model based on EPA's HSPF (Hydrologic Simulation Program-Fortan) be developed and used. Such a model has considerable advantages over other event-based models. For example, single event models cannot take into account storm events that may occur just before or just after the single, design storm event that is under consideration.	Defend the Bay	
27	Section 4.5.3.4	Such an HSPF model should always be used in designing water quality (flow) control BMPs as well as water quality control BMPs based on the flow rate of runoff. Where such a model is not available, however, an event model based on the Natural Resources Conservation Service (NRCS) Unit Hydrograph (SCSUH) method, or equivalent, should be used with specified parameters. For volume-based BMPs, an event model based on the NRCS Unit Hydrograph method, or equivalent, is acceptable.	Defend the Bay	

Summary of SDRWQCB, Defend the Bay Comments on Public Review Draft of Riverside County WQMP (continued)

	Section of WQMP	Comment	Made By	How Addressed
28	Section 4.5.4	This section provides that if on-site treatment control BMPs are determined to be infeasible or impracticable, equivalent treatment may be provided off-site when approved by the Permittee. The Model's language, however, must require that equivalent off-site treatment be provided. Any waiver of on-site treatment control must be strongly linked to an equivalent reduction of pollution elsewhere in the watershed in order to comply with the Permit terms. Furthermore, the Model fails to comprehensibly specify the standard by which the permitting agency will determine that on-site treatment is infeasible or impracticable. The Permit specifies that equivalent off-site treatment should only be approved if all available onsite treatment control BMPs have been considered and rejected as impractical, and the cost of technically feasible on-site treatment BMPs greatly outweighs the pollution control benefits. The Model should incorporate such language. More over, the Model should also specify that it is up to the project proponent to establish infeasibility and that if equivalent treatment is approved, the approving Agency must notify the RWQCB in writing within 30 days, and include the approval documentation and a copy of the project WQMP. It should also be made explicit that the offsite solution may not cause or contribute to an exceedance of water quality objectives.	Defend the Bay	The Permittees have clarified Section 4.5.4 to clarify that off-site bmps are an alternative to on-site BMPs (and not limited to cases of infeasibility) and that they must provide equivalent treatment. Waiver requirements are dealt with in Section 7 (and comments related to Section 7). This section was not intended to function as a de-facto waiver.
29	Section 5.0	Regionally-based Treatment Control for installation of BMPs from development projects may result in non-compliance with Finding 18 and Section F.2.b.(3) of R9-2004-001. The WQMP would have to clearly specify that although structural treatment BMPs may be shared by multiple development projects. The BMPs must be installed at a location prior to discharge to a receiving water.	SDRWQCB	Bullet Point added to Section 5.

Summary of SDRWQCB, Defend the Bay Comments on Public Review Draft of Riverside County WQMP (continued)

	Section of WQMP	Comment	Made By	How Addressed
30	Section 5.0:	The Model's handling of regional treatment facilities is inadequate, especially in light of the specificity that is provided in both the Orange County and San Bernardino County Model WQMPs. For instance, the Riverside Model does not require assurance that a regional or watershed plan be in place and approved by the Executive Officer of the Santa Ana Regional Water Quality Control Board. Furthermore, the Model does not sufficiently specify what is "adequate capacity." For project proponents to rely on regional treatment, these concerns must be addressed.	Defend the Bay	Refer to response #38 to SARWQCB comments. The Permittees believe that the bullet sufficiently describes "adequate capacity."
31	Section 7.0	Waiver of Treatment Control BMP Requirements allows elimination of structural treatment BMPs if site design and source control BMPs effectively eliminate pollutant discharges. R9-2004-001does not allow for the waiver of structural treatment BMPs based only on site design and source control BMPs. However, Section F.2.b.4 does allow for an equivalent method for calculating volume or flow that must be treated. An equivalent method could include site design measures to reduce the amount of runoff that must be treated structurally. In addition, a waiver of structural treatment BMPs is only allowed when all available BMPs have been considered and rejected as infeasible.	SDRWQCB	Waiver provisions rewritten. Also, the Permittees will propose the site/source methodology to the San Diego Board per the F.2.b.4 provisions.

Summary of SDRWQCB, Defend the Bay Comments on Public Review Draft of Riverside County WQMP (continued)

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32	Section 7.0:	The second paragraph in this section allows permittees to waive treatment control requirements. While the first paragraph allows treatment controls to be waived where they are essentially unnecessary given successful implementation of source control and site design BMPs, the waiver in the second paragraph is largely akin to that provided in Section 4.5.4-except without any assurance that resulting discharges will be offset or mitigated somewhere in the watershed. As such, Section 7.0 inappropriately contemplates allowing projects to cause or contribute to exceedance of water quality standards. Consequently, second paragraph of section 7 should either be deleted or augmented with a waiver mitigation program such as the one specified in the Orange County WQMP.	Defend the Bay	The Waiver provisions have been modified to be consistent with the Santa Ana Permit requirements. Also note that Section 4.5.4 was not intended to function as a de-facto waiver.
33	Exhibit A, § IV:	The template WQMP sets forth that a change to the hydrologic regime of a project site would be considered a hydrologic condition of concern if the change would have a significant impact on downstream natural channels and habitat integrity, alone or as part of a cumulative impact from development in the watershed. This is inconsistent with the guidance set forth in the Model, which sets forth that all changes to the hydrologic regime are of concern unless specific conditions are met.	Defend the Bay	Section 4.3 and Exhibit A revised to be made consistent with the Permit requirements.
34	Exhibit F	Provides definitions that would need to be consistent with R9-2004-001.	SDRWQCB	Glossary revisions incorporated.